

AMENDMENTS TO THE CLAIMS

1. (currently amended) In a graphical modeling environment, a method comprising:
 - receiving a user request to define a parameter or a setting of a block in a simulatable block diagram model;
 - determining how defining the parameter or the setting of the block in the simulatable block diagram model according to the user request will alter code corresponding to the block, without generating code for the simulatable block diagram model, the code for the simulatable block diagram model being executable to simulate the simulatable block diagram model;
 - generating, using a predictor mechanism, a preview of code representative of the code corresponding to the block prior to ~~generation of~~ generating, using an execution engine, the code for the simulatable block diagram model based on the determining, the preview of code predicting and emulating the code as if generated by the execution engine ~~the code for the simulatable block diagram model being executable to simulate the simulatable block diagram model;~~ and
 - displaying the preview of the code on a graphical user interface.
2. (previously presented) The method of claim 1, wherein receiving the user request to define the parameter or the setting for the block comprises receiving the parameter or the setting via the graphical user interface.
3. (previously presented) The method of claim 2, wherein the preview of the code is displayed on a graphical user interface that receives the user request.
4. (previously presented) The method of claim 1, wherein the preview of the code comprises a subset of corresponding code for the block.
5. (previously presented) The method of claim 4, wherein the subset of code corresponds to the parameter or the setting.
6. (currently amended) The method of claim 1, wherein generating the preview of the code comprises:

generating an estimation of the code using [[a]]the predictor mechanism.

7. (canceled)

8. (previously presented) The method of claim 1, wherein the preview of the code comprises a symbolic, non-literal representation of code corresponding to the block.

9. (previously presented) The method of claim 1, wherein the preview of the code comprises pseudo-code.

10. (previously presented) The method of claim 1, wherein generating and displaying the preview of the code execute in real-time after receiving the user request.

11. (previously presented) The method of claim 1, further comprising altering the parameter or the setting for the block after the displaying of the preview of the code.

12. (previously presented) The method of claim 11, further comprising:
generating code representing the altered parameter or the altered setting; and
displaying the code representing the altered parameter or the altered setting on the graphical user interface.

13. (previously presented) The method of claim 1, further comprising altering a second parameter or a second setting in the block diagram model after the displaying of the preview of the code.

14. (previously presented) The method of claim 12, further comprising:
generating code representing the altered second parameter or the altered second setting;
and
displaying the code representing the altered second parameter or the altered second setting on the graphical user interface.

15. (canceled)

16. (previously presented) The method of claim 1, further comprising:
receiving the parameter or the setting via a dialog box associated with the block.
17. (original) The method of claim 16, wherein the dialog box includes a code preview field for displaying the code.
18. (previously presented) The method of claim 1, wherein generating the preview of the code and displaying the preview of the code on the graphical user interface are executed automatically in response to the user defining the parameter or the setting.
19. (currently amended) In a graphical modeling environment, a method comprising:
determining how defining a parameter or a setting of a block in a simulatable block diagram model will alter code corresponding to the block, without an execution engine generating code for the simulatable block diagram model, the code being executable to simulate the simulatable block diagram model;
based on the determining, automatically updating a preview of code representative of the code corresponding to the block in the simulatable block diagram model in response to a user altering the parameter or the setting of the block, ~~the code being executable to simulate the simulatable block diagram model~~, the updating comprising:
generating the preview of code using a predictor mechanism, the preview of code predicting and emulating the code as if generated by the execution engine; and
displaying the updated preview of the code on a graphical user interface.
20. (previously presented) The method of claim 19, further comprising:
receiving the altering of the setting via the graphical user interface.
21. (previously presented) The method of claim 19, wherein the graphical user interface displays the updated preview of the code in real time after the altering of the setting.
22. (previously presented) The method of claim 19, further comprising:

receiving a cancellation of the altering of the setting after displaying the updated preview of the code.

23. (currently amended) A computer-readable storage medium for use with an electronic device having a processor, the medium storing instructions executable by the processor of the electronic device, the medium storing:

one or more instructions for receiving a user request to define a parameter or a setting of a block in a simulatable block diagram model;

one or more instructions for determining how defining the parameter or the setting of the block in the simulatable block diagram model according to the user request will alter code corresponding to the block, without generating code for the simulatable block diagram model;

one or more instructions for generating, using a predictor mechanism, based on the determining, a preview of code in response to the user request, the generating the preview occurring prior to generating the code for the block diagram model using an execution engine, the preview of ~~the code representative of~~ predicting and emulating the code corresponding to the block as if generated by the execution engine, where the preview of the code is presented in a coding format that differs from a coding format of the code corresponding to the block; and

one or more instructions for displaying the preview of the code on a graphical user interface.

24. (currently amended) A computer-readable storage medium for use with an electronic device having a processor, the medium storing instructions executable by the processor of the electronic device, the medium storing:

one or more instructions for determining how defining a parameter or a setting of a block in a simulatable block diagram model will alter code corresponding to the block, without an execution engine generating code for the simulatable block diagram model, the code being executable to simulate the simulatable block diagram model;

one or more instructions for automatically updating, based on the determining, a preview of code representative of the code corresponding to the block in the simulatable block diagram model in response to a user altering the parameter or the setting of the block, ~~the code being executable to simulate the simulatable block diagram model~~, the one or more instructions for updating comprising:

one or more instructions for generating the preview of code using a predictor mechanism, the preview of code predicting and emulating the code as if generated by the execution engine; and

one or more instructions for displaying the updated preview of the code on a graphical user interface.

25. (previously presented) A system for generating and displaying a graphical programming application, comprising:

user-operable input means for inputting data to the graphical programming application;

a display device for displaying a simulatable block diagram model; and

an electronic device including memory for storing computer program instructions and data, and a processor for executing the stored computer program instructions, the computer program instructions including:

instructions for determining how defining a property of a block in the simulatable block diagram model will alter code corresponding to the block, without generating code for the simulatable block diagram model, and

instructions for providing, based on the determining, a code preview to a user on the display device, the code preview displaying a preview of code representative of the code corresponding to the block in the simulatable block diagram model after the user defines the property of the block using the user-operable input means, and the preview of the code being created by a predictor mechanism which emulates how the code appears when the code is generated by an execution engine.

26. (original) The system of claim 25, wherein the input means comprises a graphical user interface displayed on the display device.

27. (original) The system of claim 26, wherein the graphical user interface includes a field for displaying the code preview.

28. (currently amended) A system for generating and displaying a graphical programming application, comprising:

user-operable input means for inputting data to the graphical programming application;

a display device for displaying a simulatable block diagram model; and
an electronic device including memory for storing computer program instructions and data, and a processor for executing the stored computer program instructions, the computer program instructions including instructions for:

receiving a first datum altering a setting of a first portion of the simulatable block diagram model,

determining how altering the setting of the first portion of the simulatable block diagram model will alter code for the simulatable block diagram model, without an execution engine generating the code for the simulatable block diagram model,

in response to the first datum, generating, based on the determining, a preview of code using a predictor mechanism, the preview of code representative of predicting and emulating code for the first portion as if generated by the execution engine prior to generation of the code for the simulatable block diagram model by the execution engine,

receiving a second datum altering a setting of a second portion of the simulatable block diagram model, and

in response to the second datum, automatically updating a portion of the preview of the code, the updated portion of the preview of the code being presented in a format that differs from an un-updated portion of the preview of the code.

29. (original) The system of claim 28, wherein the input means comprises a graphical user interface displayed on the display device.

30. (original) The system of claim 29, wherein the graphical user interface includes a field for displaying the updated code.